

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-42. (Canceled)

43. (Previously presented) A system for exchanging data messages relating to at least a bid and an offer, the system comprising:
a network connected to workstations and a host;
a first workstation of the workstations, the first workstation sending a first data message to the host indicating a bid in response to an initial offer; ~~and~~
a second workstation of the workstations, the second workstation receiving a second data message indicative of a match of the offer and the bid ~~the~~ and sending ~~an~~ a match acknowledgement of the received match to the host; and
~~the second workstation having a confirmation timer at the second workstation for measuring a time elapsed from reception of the second signal or from sending the match acknowledgement from the second workstation to the host until the second workstation receives a third data message, the third data message comprising a confirmed trade data message from the host confirming acknowledgement receipt of the match acknowledgement from the second workstation.~~

44. (Cancelled)

45. (Previously Presented) The system according to claim 43, further comprising at least one storage node for recording the completion of a purchase relating to the bid.

46. (Previously presented) The system according to claim 43, wherein prior to the transmission of the first data message by the first workstation, the second workstation transmits the initial offer to the host.

47. (Previously Presented) The system according to claim 46, wherein the host generates and transmits an acknowledgement of the initial offer to the second workstation.

48. (Cancelled)

49. (Cancelled)

50. (Previously Presented) The system according to claim 43, wherein the second workstation further comprises:

a storage unit for storing an indication that a purchase relating to the offer was not completed upon the elapsed time measured by the confirmation timer exceeding a predetermined confirmation timeout period.

51. (Previously presented) The system according to claim 50, wherein the second workstation further comprises:

a display for displaying that a late confirmation was received upon the second workstation receiving the third data message after the predetermined confirmation timeout period has expired for the purchase.

52. (Previously Presented) The system according to claim 43, wherein the host matches bids and offers from the workstations in accordance with predetermined matching criteria.

53. (Previously presented) The system according to claim 52, further comprising:

an acknowledgement timer for measuring the time elapsed from reception of the first data message by the host from the first workstation until reception of the acknowledgement by the host from the second workstation;

a storage unit for storing an indication that a purchase was not acknowledged upon the elapsed time measured by the acknowledgement timer exceeding a predetermined acknowledgement timeout period.

54. (Previously presented) A method for acknowledging the receipt of data messages relating to bids and offers in an electronic trading system, the electronic trading system including a host and at least first and second workstations coupled to a network, the method comprising the steps of:

- sending an initial bid to the host from the second workstation;
- receiving a match notification from the host at the second workstation in response to an offer from the first workstation;
- sending from the second workstation to the host an acknowledgement of the receipt of the match notification;
- receiving from the host at the second workstation an indication that the host acknowledges the acknowledgement from the second workstation; and
- determining when the indication that the host acknowledges the acknowledgement from the second workstation has not been received during an interval.

55. (Previously Presented) The method according to claim 54, further comprising the step of

- receiving an acknowledgement of the initial bid from the host at the second workstation.

56. (Previously Presented) The method according to claim 54, wherein the step of determining when the indication that the host acknowledges the acknowledgement from the second workstation has not been received during an interval comprises the steps of:

- measuring an elapsed confirmation time from receiving the match notification from the host at the second workstation or from sending from the second workstation to the host an acknowledgement of the receipt of the match notification until the second workstation receives

from the host the indication that the host received the acknowledgement of the receipt of the match notification from the second workstation; and

storing an indication that the transaction is unconfirmed upon the measured elapsed confirmation time exceeding a predetermined confirmation timeout period.

57. (Previously Presented) The method according to claim 56, further comprising the step of:

displaying at the second workstation that a late confirmation was received after the predetermined confirmation timeout period has expired in response to the second workstation receiving after the timeout period the indication that the host received the acknowledgement of the receipt of the match notification sent from the second workstation.

58. (Previously Presented) The method according to claim 54, further comprising the steps of:

measuring an elapsed acknowledgement time from receiving the offer at the host from the first workstation until the host receives the acknowledgement of receipt of the match notification from the second workstation; and

storing an indication that the offer transmitted to the second workstation is unacknowledged upon the measured elapsed acknowledgement time exceeding a predetermined acknowledgement timeout period.

59. (Previously Presented) A computer-readable medium having computer-executable instructions for performing steps comprising:

receiving at a networked processor an offer from a first workstation in response to an initial bid;

sending a match notification from the networked processor to a second workstation, the match notification including the offer;

receiving at the networked processor from the second workstation an acknowledgement of a transaction based on the match notification;

sending from the networked processor to the first and second workstations an indication that the networked processor received the acknowledgement of the transaction; and

receiving an alarm from one of the workstations notifying the networked processor that the indication that the networked processor received the acknowledgement was not received by one of the workstations during an interval.

60. (Previously Presented) The computer-readable medium of claim 59 having further computer-executable instructions for performing the following steps:

receiving at the networked processor the initial bid from the second workstation; and
sending an acknowledgement of the initial bid from the networked processor to the second workstation.

61. (Previously Presented) The computer-readable medium of claim 59 having further computer-executable instructions for performing steps comprising:

measuring an elapsed acknowledgement time from receiving the offer at the networked processor from the first workstation until the networked processor receives the acknowledgement of the transaction from the second workstation; and

storing an indication that the receipt of the match notification is unacknowledged upon the measured elapsed acknowledgement time exceeding a predetermined acknowledgement timeout period.

62. (Previously presented) A first workstation participating in the exchange of data messages, the data messages including at least a bid and an offer, the first workstation connected to a network, the network connected to at least a second workstation and a host, the first workstation comprising:

a receiver for receiving an initial offer;
a processor for processing the initial offer;

a confirmation timer for measuring time elapsed from the workstation receiving a match notification data message from the host or sending a match acknowledgement data message to the host until the workstation receives a confirmed trade data message from the host; and

an output for outputting a first data message to the network, the first data message signaling a bid in response to the initial offer;

the receiver also receiving a match notification data message wherein the match notification data message indicates the acknowledgement of a receipt of the first data message by the second workstation, and an unconfirmed trade data message when said the match acknowledgement was not received by the host during an interval.

63. (Previously Presented) A computer-readable medium having computer-executable instructions for performing steps associated with a purchase comprising a bid and an offer comprising:

transmitting to a host via a network an offer from a first workstation in response to a received initial bid;

receiving a match notification from the host indicating a match of the bid and the offer; measuring the time elapsed from reception of the match notification to reception of a confirmation; and

receiving the confirmation from the host indicating that a second workstation originating the initial bid has acknowledged the transmitted offer; and

receiving an alert from the network when the confirmation has not been received during an interval.

64. (Previously Presented) The computer readable medium according to claim 63, having further computer readable instructions for performing the step of: processing the confirmation as an acceptance of the transmitted offer.

65. (Previously presented) The system according to claim 43, wherein the third data message indicates that a transaction relating to the offer is complete.

66. (Previously Presented) The method according to claim 54, wherein the indication that the host acknowledges the acknowledgement from the second workstation signifies the completion of a transaction relating to the bid.

67. (Cancelled)

68. (Previously presented) A system for exchanging data messages relating to at least a bid and an offer, the system comprising:

a network connected to workstations and a host;

a first workstation of the workstations, the first workstation sending a first data message to the network signaling an offer in response to an initial bid; and

a second workstation of the workstations, the second workstation receiving a second data message indicative of a match of the bid and the offer and sending an acknowledgement of the received match to the host, the second workstation having a confirmation timer for measuring a time elapsed from reception of the second data message the or from sending the acknowledgement until the second workstation receives a third data message from the host, the third data message comprising a confirmed trade data message from the host confirming acknowledgment of the match acknowledgment from the second workstation.

69. (Cancelled)

70. (Previously Presented) The system according to claim 68, further comprising at least one storage node for recording the completion of a purchase relating to the offer.

71. (Previously presented) The system according to claim 68, wherein prior to the transmission of the first data message by the first workstation, the second workstation transmits the initial bid to the host.

72. (Previously Presented) The system according to claim 71, wherein the host generates and transmits an acknowledgement of the initial bid to the second workstation.

73. (Cancelled)

74. (Cancelled)

75. (Previously Presented) The system according to claim 68, wherein the second workstation further comprises:

a storage unit for storing an indication that a purchase relating to the bid was not completed upon the elapsed time measured by the confirmation timer exceeding a predetermined confirmation timeout period.

76. (Previously presented) The system according to claim 75, wherein the second workstation further comprises:

a display for displaying that a late confirmation was received upon the second workstation receiving the third data message after the predetermined confirmation timeout period has expired for.

77. (Previously Presented) The system according to claim 68, wherein the host matches bids and offers from the workstations in accordance with predetermined matching criteria.

78. (Previously Presented) The system according to claim 77, further comprising:

an acknowledgement timer for measuring the time elapsed from reception of the first signal by the host from the first workstation until reception of the acknowledgement by the host from the second workstation;

a storage unit for storing an indication that a purchase was not acknowledged upon the elapsed time measured by the acknowledgement timer exceeding a predetermined acknowledgement timeout period.

79. (Previously presented) A method for acknowledging the receipt data messages relating to bids and offers in an electronic trading system, the electronic trading system including a host and at least first and second workstations coupled to a network, the method comprising the steps of:

- sending an initial offer to the host from the second workstation;
- receiving a match notification from the host at the second workstation in response to a bid from the first workstation;
- sending from the second workstation to the host an acknowledgement of the receipt of the match notification;
- receiving from the host at the second workstation an indication that the host acknowledges the acknowledgement from the second workstation; and
- determining when the indication that the host acknowledges the acknowledgement from the second workstation has not been received during an interval.

80. (Previously Presented) The method according to claim 79, further comprising the step of:

- receiving an acknowledgement of the initial offer from the host at the second workstation.

81. (Previously Presented) The method according to claim 79, wherein the step of determining when the indication that the host acknowledges the acknowledgement from the second workstation has not been received during an interval comprises the steps of:

- measuring an elapsed confirmation time from receiving the match notification from the host at the second workstation or from sending from the second workstation to the host acknowledgment of the receipt of the match notification until the second work station receives

from the host the indication that the host received the acknowledgement of the receipt of the match notification from the second workstation; and

storing an indication that the transaction is unconfirmed upon the measured elapsed confirmation time exceeding a predetermined confirmation timeout period.

82. (Previously Presented) The method according to claim 81, further comprising the step of:

displaying at the second workstation that a late confirmation was received after the predetermined confirmation timeout period has expired in response to the second workstation receiving after the timeout period the indication that the host received the acknowledgement of the receipt of the match notification sent from the second workstation.

83. (Previously Presented) The method according to claim 79, further comprising the steps of:

measuring an elapsed acknowledgement time from receiving the bid at the host from the first workstation until the host receives the acknowledgement of receipt of the match notification from the second workstation; and

storing an indication that the bid transmitted to the second workstation is unacknowledged upon the measured elapsed acknowledgement time exceeding a predetermined acknowledgement timeout period.

84. (Previously Presented) A computer-readable medium having computer-executable instructions for performing steps comprising:

receiving at a networked processor a bid from a first workstation in response to an initial offer;

sending a match notification from the networked processor to a second workstation, the match notification including the offer;

receiving at the networked processor from the second workstation an acknowledgement of a transaction based on the match notification;

sending from the networked processor to the first and second workstations an indication that the networked processor received the acknowledgement of the transaction; and

receiving an alarm from one of the workstations notifying the network that the indication that the networked processor received the acknowledgement was not received by the one of the workstations during an interval.

85. (Previously Presented) The computer-readable medium of claim 84 having further computer-executable instructions for performing the following steps:

receiving at the networked processor the initial offer from the second workstation; and
sending an acknowledgement of the initial offer from the networked processor to the second workstation.

86. (Previously Presented) The computer-readable medium of claim 84 having further computer-executable instructions for performing steps comprising:

measuring an elapsed acknowledgement time from receiving the bid at the networked processor from the first workstation until the networked processor receives the acknowledgement of the transaction from the second workstation; and

storing an indication that the receipt of the match notification is unacknowledged upon the measured
elapsed acknowledgement time exceeding a predetermined acknowledgement timeout period.

87. (Previously presented) A workstation participating in the exchange of data messages, the data messages including at least a bid and an offer, the workstation in communication with a host, the host with at least a second workstation, the workstation comprising:

a receiver for receiving an initial bid from the host;
a processor for processing the initial bid;

a confirmation timer for measuring time elapsed from the workstation receiving a match notification data message or sending a match acknowledgement data message until the workstation receives a confirmed trade data message from the host; and

an output for outputting a first data message to the network, the first data message signaling an offer in response to the initial bid,

the receiver also receiving a match notification data message wherein the match notification data message indicates the acknowledgement of a receipt of the first data message by the second workstation and an unconfirmed trade data message when the match acknowledgement was not received by the host during an interval.

88. (Previously Presented) A computer-readable medium having computer-executable instructions for performing steps associated with a purchase comprising an offer and a bid comprising:

transmitting to a host a bid from a first workstation in response to a received initial offer; receiving a match notification from the host indicating a match of the bid and the offer; measuring the time elapsed from reception of the match notification to reception of a confirmation;

receiving the confirmation from the host indicating that a second workstation originating the initial offer has acknowledged the transmitted bid; and

receiving an alert from the host when the second acknowledgement has not been received during an interval.

89. (Previously Presented) The computer readable medium according to claim 88, having further computer readable instructions for performing the step of: processing the confirmation as an acceptance of the transmitted bid.

90. (Previously presented) The system according to claim 68, wherein the third data message indicates that a transaction relating to the offer is complete.

91. (Previously Presented) The method according to claim 79, wherein the indication that the network acknowledges the acknowledgement from the second workstation signifies the completion of a transaction relating to the offer.

92. (Cancelled)

93. (Previously presented) A system for exchanging data messages relating to trading instruments, the system comprising:

a host in communication with workstations;

a first workstation of the workstations, the first workstation sending a second transaction message to the host in response to a first transaction message; and

a second workstation of the workstations, the second workstation receiving a third transaction message from the host indicative of a match between the first and second transaction messages and sending an acknowledgement of the received third transaction message to the host, the second workstation having a confirmation timer for measuring a time elapsed from reception of the third message or from sending the acknowledgement until the second workstation receives a fourth message comprising a confirmed trade data message;

wherein prior to the transmission of the second transaction message by the first workstation, the second workstation transmits the first transaction message to the host.

94. (Previously presented) The system according to claim 93, wherein the confirmed trade data message confirms completion of a purchase relating to the first transaction.

95. (Previously Presented) The system according to claim 93, further comprising at least one storage node for recording the completion of a purchase relating to the first transaction message.

96. (Cancelled)

97. (Cancelled)

98. (Cancelled)

99. (Previously presented) The system according to claim 93, wherein the third transaction message is a match notification data message generated by the host.

100. (Previously presented) The system for exchanging data messages relating to trading instruments of claim 93, wherein the second workstation comprises:

a confirmation timer for measuring the time elapsed from the first workstation receiving a fifth third transaction message indicative of a match between said first and second transaction messages or from sending an acknowledgment of the received fifth transaction message to the host until the first workstation receives a sixth transaction message comprising a confirmed trade data message; and

a storage unit for storing an indication that a purchase relating to the first transaction message was not completed upon the elapsed time measured by the confirmation timer exceeding a predetermined confirmation timeout period.

101. (Previously Presented) The system according to claim 100, wherein the first workstation further comprises:

a display for displaying that a late confirmation was received upon the first workstation receiving the sixth transaction message after the predetermined confirmation timeout period has expired.

102. (Cancelled)

103. (Previously presented) The system for exchanging data messages relating to trading instruments of claim 93, the host further comprising:

wherein the host further comprises:

a computer for matching at least bids or offers from the workstations in accordance with predetermined matching criteria.

an acknowledgement timer for measuring the time elapsed from reception of the second transaction message by the host from the first workstation until reception of the acknowledgement by the host from the second workstation; and

a storage unit for storing an indication that a purchase was not acknowledged upon the elapsed time measured by the acknowledgement timer exceeding a predetermined acknowledgement timeout period.

104. (Previously presented) A method for acknowledging the receipt of data messages relating to trading instruments in an electronic trading system, the electronic trading system including a host and at least first and second workstations coupled to a network, the method comprising the steps of:

sending a first transaction message from the second workstation to the host;

receiving an acknowledgement of the first transaction message from the host at the second workstation;

sending a second transaction message from the first workstation to the host in response to the first transaction message;

receiving a match notification message from the host at the second workstation, the match notification message indicating a match of the first transaction message and the second transaction message;

sending from the second workstation to the host an acknowledgement of the receipt of the match notification message;

sending from the host to the second workstation an indication that the host acknowledges the acknowledgement from the second workstation; and

determining when the indication that the host acknowledges the acknowledgement from the second workstation has not been received during an interval at the second workstation.

105. (Cancelled)

106. (Previously presented) A method for acknowledging the receipt of data messages relating to trading instruments in an electronic trading system, the electronic trading system including a host and at least first and second workstations coupled to a network, the method comprising the steps of:

sending a second transaction message from the first workstation to the host in response to a first transaction message from the second workstation;

receiving a match notification data message from the host at the second workstation, the match notification data message indicating a match of the first transaction message and the second transaction message;

sending from the second workstation to the host an acknowledgement of the receipt of the match notification message;

sending from the host to the second workstation an indication that the host acknowledges the acknowledgement from the second workstation,

measuring an elapsed confirmation time from receiving the match notification message from the host at the second workstation or from sending to the host the acknowledgment of reception of the match notification message until the second workstation receives from the host the indication that the host received the acknowledgement of reception of the match notification message from the second workstation; and

storing an indication that the transaction is unconfirmed upon the measured elapsed confirmation time exceeding a predetermined confirmation timeout period.

107. (Previously Presented) The method according to claim 106, further comprising the step of:

displaying at the second workstation that a late confirmation was received, after the predetermined confirmation timeout period has expired in response to the second workstation receiving after the timeout period the indication that the host received the acknowledgement of the receipt of reception of the match notification message sent from the second workstation.

108. (Previously Presented) The method according to claim 106 further comprising the steps of:

measuring an elapsed acknowledgement time from receiving the second transaction message at the host from the first workstation until the host receives the acknowledgement of reception of the match notification message from the second workstation; and

storing an indication that the match notification message transmitted to the second workstation is unacknowledged upon the measured elapsed acknowledgement time exceeding a predetermined acknowledgement timeout period.

109. (Cancelled)

110. (Previously Presented) A computer-readable medium having computer-executable instructions for performing steps comprising:

receiving at a networked processor a first transaction message from a second workstation;
sending an acknowledgement of the first transaction message from the networked processor to the second workstation;

receiving at the networked processor a second transaction message from a first workstation in response to the first transaction message;

sending a match notification message from the networked processor to the second workstation;

receiving at the networked processor from the second workstation an acknowledgement of a transaction based on the match notification message ;

sending from the networked processor to the first and second workstations an indication that the networked processor received the acknowledgement of the transaction; and

receiving an alarm from one of the workstations notifying the networked processor that the indication that the networked processor received the acknowledgement was not received by one of the workstations during an interval.

111. (Previously Presented) The computer-readable medium of claim 110 having further computer-executable instructions for performing steps comprising:
measuring an elapsed acknowledgement time from receiving the second transaction message at the networked processor from the first workstation until the networked processor receives the acknowledgement of the receipt of the match notification message from the second workstation; and
storing an indication that the receipt of the second transaction message is unacknowledged upon the measured elapsed acknowledgement time exceeding a predetermined acknowledgement timeout period.

112. (Previously presented) A first workstation participating in the exchange of data messages, the data messages including at least a bid or an offer, the first workstation connected to a network, the network connected to at least a second workstation and a host, the first workstation comprising:
a receiver for receiving messages;
a processor for processing the messages coupled to the receiver;
a confirmation timer for measuring time elapsed from the workstation receiving a match notification message from the host or sending a match acknowledgement message to the host until the workstation receives a confirmed trade message from the host; and
an output for outputting messages coupled to the processor.

113. (Previously Presented) A computer-readable medium having computer-executable instructions for performing steps associated with a purchase comprising:
transmitting to a host a second transaction message from a first workstation in response to a received first transaction message;
receiving a match notification from the host indicating receipt of the second transaction message and a match between the first and second transaction messages;

measuring the time elapsed from reception of the match notification or from sending an acknowledgment to the host acknowledging reception of the match notification to reception of a confirmation; and

receiving the confirmation from the host indicating that a second workstation originating the first transaction message has acknowledged the match notification message;

and receiving an alert from the host when the host has not received the acknowledgement of the match notification message after a predetermined interval.

114. (Previously Presented) The computer readable medium according to claim 113, having further computer readable instructions comprising the step of:

processing the confirmation as an acceptance of a transaction relating to the second transaction message.

115. (Previously Presented) The system according to claim 93, wherein the fourth message indicates that a transaction relating to the second transaction message is complete.

116. (Previously Presented) The method according to claim 104, wherein the indication that the host acknowledges the acknowledgement from the second workstation signifies the completion of a transaction relating to the first transaction message.

117. (Cancelled)

118. (Cancelled)

119. (Cancelled)

120. (Cancelled)

121. (Previously Presented) A method for confirming a transaction in an electronic trading system, the electronic trading system including a networked processor in communication with a first workstation and a second workstation, the method comprising:

receiving a match notification message at a first workstation, the match notification message indicating a match between a first trade order associated with the first workstation and a second trade order associated with the second workstation, the first and second trade orders each selected from the group consisting of a bid and an offer; and

timing a confirmation period between one of receiving the match notification message at the first workstation and sending to the networked processor an acknowledgment of reception of the match notification message, and receiving a confirmation message from the networked processor.

122. (Previously Presented) A method for confirming a transaction in an electronic trading system, the electronic trading system including a networked processor in communication with a first workstation and a second workstation, the method comprising

receiving at the networked processor a first transaction message from the second workstation;

receiving at the networked processor a second transaction message from the first workstation in response to the first transaction message;

sending a match notification message from the networked processor to the first and second workstations;

receiving at the networked processor from the first workstation an acknowledgement of a transaction based on the match notification message;

receiving at the networked processor from the second workstation an acknowledgement of a transaction based on the match notification message;

sending from the networked processor to the first and second workstations an indication that the networked processor received the acknowledgements of the transaction; and

receiving an alarm from one of the first and second workstation notifying the networked processor that the respective indication that the networked processor received the acknowledgements was not received by the one of the first and second workstation during an interval.

123. (Previously Presented) The method of claim 122 further comprising:
measuring an elapsed acknowledgement time from receiving the second transaction message at the networked processor from the first workstation until the networked processor receives the acknowledgement of the receipt of the match notification message from the second workstation; and
storing an indication that the receipt of the second transaction message is unacknowledged upon the measured elapsed acknowledgement time exceeding a predetermined acknowledgement timeout period.